**UNITED STATES DISTRICT COURT**
**NORTHERN DISTRICT OF OHIO**
**EASTERN DIVISION**

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| Datatrak International, Inc., | ) | **CASE NO. 1:11 CV 458** |
| | ) | |
| Plaintiff, | ) | **JUDGE PATRICIA A. GAUGHAN** |
| | ) | |
| Vs. | ) | |
| | ) | |
| Medidata Solutions, Inc., | ) | **Memorandum of Opinion and Order** |
| | ) | |
| Defendant. | ) | |

**INTRODUCTION**

This matter is before the Court upon Defendant Medidata's Motion to Dismiss (Doc. 88).

Because defendant filed an answer, the Court will treat the motion as a motion for judgment on

the pleadings. This is a patent infringement case. For the reasons that follow, the motion is

GRANTED.

**FACTS**

One patent is at issue in this lawsuit. The "methods and systems" patent is directed at

"searching for and unifying data." (Am. Compl. ¶ 9). Claim 31 of the 7,464,087 ('087) patent is

representative of the claimed methods[1] and provides as follows:

> 31. A method for unifying a plurality of data sources storing data related to an industry, each of the plurality of data sources being a data source instance of a data source type, the method including:
>
>> a) storing information in a first plurality of nodes that defines a corresponding plurality of business context dimensions for the industry and interconnecting the first plurality of nodes in a manner that represents relationships between the corresponding business context dimensions;
>>
>> b) storing information in a second plurality of nodes that indicates data stored within the plurality of data sources corresponds to at least a portion of the plurality of business context dimensions for at least one of  i) each data source type represented within the plurality of data sources or ii) each data source instance represented within the plurality of data sources, and mapping the second plurality of nodes to the first plurality of nodes based on corresponding business context dimensions;
>>
>> c) storing information in each node of the second plurality of nodes that defines at least one business context dimension instance from the plurality of data sources, each business context dimension instance relating to an instance of stored data within the corresponding data source instance associated with the corresponding business context dimension;
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>> d) initiating a request for desired information from the plurality of data sources

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[1]    In its opening brief, defendant argued that claims 31 and 6 are representative claims.  Other than pointing to limitations contained in dependent claims 7 and 27, plaintiff does not dispute that claims 31 and 6 are representative.  The Federal Circuit has held that a court need only analyze a representative claim in order to address invalidity based on patent-eligible subject matter.  *See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014).  The Court will, however, address the limitations plaintiff identifies in claims 7 and 27.  Plaintiff argues in footnote five of its opposition brief that defendant seeks invalidity only with regard to the asserted claims.  According to plaintiff, discovery may show that other non-asserted claims are infringed.  The Court rejects this argument.  As set forth herein, the Court finds that the asserted claims are invalid.  Because those are the only claims at issue in this lawsuit, dismissal is warranted.

based at least in part on selection of one or more of the plurality of business context dimensions defined by the first plurality of nodes; and

e) identifying data source instances and business context dimension instances associated with the at least one selected business context dimension based at least in part on information stored in the first and second pluralities of nodes.

Similarly, claim 6 is representative of the claimed systems and provides as follows:

6. A system for unifying a plurality of data sources storing data related to an industry, each of the plurality of data sources being a data source instance of a data source type, the system including:

one or more computer systems, comprising;

a first plurality of nodes storing information defining a corresponding plurality of business context dimensions for the industry, the first plurality of nodes being interconnected in a manner that represents relationships between the corresponding business context dimensions;

a second plurality of nodes storing information relating data stored within the

plurality

of data sources to at least a portion of the plurality of business context dimensions for at least one of i) each data source type represented within the plurality of data sources and ii) each data source instance represented within the plurality of data sources, the second plurality of nodes mapped to the first plurality of nodes based on corresponding business context dimensions, each node of the second plurality of nodes storing information defining at least one business context dimension instance from the plurality of data sources, each business context dimension instance relating to an instance of stored data within the corresponding data source instance associated with the corresponding business context dimension; and

a first logic element in operative communication with the first and and second pluralities of nodes to selectively request desired information from the plurality of data sources based at least in part on selection of one or more of the plurality of business context dimensions defined by the first plurality of nodes, wherein the first logic element identifies data source instances and business context dimension instances associated with the at least one selected business context dimension based at least in part on information stored in the first and second pluralities of nodes, wherein the first logic element is in operative communication with the plurality of data sources to selectively submit a query to each identified data source instance for the desired information and receive a result in response to the query.

Defendant moves for judgment on the pleadings on the grounds that the '087 patent is

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invalid under 35 U.S.C. § 101 based on the Supreme Court's recent decision in *Alice Corp. Pty. Ltd. v. CLS Bank International,* 134 S.Ct. 2347 (2014).  Plaintiff opposes the motion.

### **ANALYSIS**

1.  Propriety of a motion to dismiss

As an initial matter, the Court finds that it is procedurally proper to address defendant's arguments concerning invalidity based on patent-eligibility at the pleading stage.  *See, Content Extraction and Transmission, LLC v. Wells Fargo National Bank Association*, 776 F.3d 1343 (Fed. Cir. 2014).  This is especially so in light of the fact that defendant concedes to plaintiff's proposed claim construction.  In addressing defendant's arguments, the Court will presume the patents are valid and grant the motion only if defendant is able to show invalidity by clear and convincing evidence.  Although post-*Alice* courts appear to call into question whether a presumption of validity applies in this context, especially where the patents issued before the Court's pronouncement in *Alice*, the Court will apply the presumption out of an abundance of caution.   The Court will not, however, consider the expert affidavit offered by plaintiff as evidentiary matters outside of the complaint are not to be considered by a Court in addressing a motion under Rule 12.  With these standards in mind, the Court turns to defendant's invalidity argument.

2.  *Alice*

Defendant asks that the Court declare the patent at issue invalid because it is drawn to an abstract idea.  Pursuant to 35 U.S.C. § 101, [w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore...."  Section 101 is limited, however, and does not cover

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"laws of nature, natural phenomena, and abstract ideas." *Alice*, 134 S.Ct. at 2354. In "applying

the § 101 exception, we must distinguish between patents that claim the 'building block[s]' of

human ingenuity and those that integrate the building blocks into something more." *Id*. (*Citing*

*Mayo Collaborative Services, v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289, 1303 (2012)).

In *Alice*, the Supreme Court employed a two-part test "for distinguishing patents that

claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible

applications of those concepts." *Id*. at 2355. Courts must tread carefully because "at some level,

all inventions...embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or

abstract ideas." *Id*. at 2354. First, the court must determine "whether the claims at issue are

directed at a patent-ineligible concept." If the claims are so directed, the Court must proceed to

step two, which involves a determination as to whether the patent contains an "inventive

concept," which is described as "an element or combination of elements that is sufficient to

ensure that the patent in practice amounts to significantly more than a patent upon the ineligible

concept itself." *Id*. (Internal citations and quotations omitted).

A.  Patent-ineligible concept

Generally speaking, this prong addresses whether the patent is directed at an "abstract"

idea because there is a longstanding rule that "an idea itself is not patentable." *Id*. (Citations and

quotations omitted). For this reason, patents describing algorithms and other mathematical

formulas are invalid. In addition, patents involving general conceptual ideas are not patentable.

*See, e.g., Alice,* 134 S.Ct. 2347 (patent directed at abstract idea of "intermediated settlement)

*Bilski v. Kappos*, 561 U.S. 593 (2010)(patent involved abstract idea of hedging); *Ultramerical,*

*Inc. v. Hulu*, LLC, 772 F.3d 709 (Fed. Cir. 2014)(patent directed at the "use of an advertisement

as a currency exchange" constituted abstract idea); *Wireless Media Innovations, LLC v. Maher Terminals*, LLC, 2015 WL 1810378 (D.N.J. April 20, 2015)(the "monitoring locations, movement, and load status of shipping containers within a container-receiving yard, and storing, reporting, and communicating this information" constitutes an "abstract idea").

As defendant notes, many courts addressing patents involving accessing and/or organizing data have concluded that these types of patents are directed at abstract ideas.  *See*, *Content Extraction and Transmission, LLC v. Wells Fargo Bank, N.A.,* 776 F.3d 1343 (Fed. Cir. 2014)(patent directed at abstract idea of collecting, recognizing data within the collected data set, and storing the recognized data in memory);  *Hewlett Packard Co. V. ServiceNow, Inc.*, 2015 WL 1133244 (N.D. Cal. March 10, 2015)('229 patent directed at abstract idea of allowing hierarchical access to information based on categories of information stored in a database); *Bascom Research, LLC v. LinkedIn Inc.,* 77 F.Supp.3d 940 (N.D. Cal. Jan. 5, 2015)(patents related to link relationships between documents located on the internet or computer networks were directed to patent ineligible abstract idea of creating, storing, and using relationships between objects); *Enfish, LLC v. Microsoft Corp.*, 56 F.Supp.3d 1167 (C.D. Cal. 2014)(patent covering method of storing and retrieving data by configuring memory according to a logical table including a plurality of logical rows, a plurality of logical columns and indexing the data stored in the table is directed at abstract idea of "storing, organizing, and retrieving memory in a logical table."); *See also, Intellectual Ventures I LLC v. Capital One Financial Corp.*, —F.Supp.3d—, 2015 WL 5165442 (D.Md. Sept. 2, 2015)(patent describing an apparatus for manipulating XML documents by using a processor with a component that "organizes data...into data objects...identifies a plurality of primary record types...maps the data components of each

data object...organizes the instances of the plurality of primary records into a hierarchy form...defines a document for display through a user interface...and detects modification of data in the dynamic document" is directed to the abstract idea of "organizing, displaying, and manipulating data").

Defendant argues that plaintiff's method and system claims are directed at the abstract idea of "organizing data by categorizing it." According to defendant, the claims (although written in complex terms) describe a method of categorizing data in two sets of tables. One set defines the categories of information, *i.e.*, the "dimensions," and the other set defines the data in the databases that fit into the categories, *i.e.*, "indexing." Defendant argues that the final two steps in the claim involve requesting data by category and identifying the databases and data associated with the category requested. Defendant argues that the dependent method claims add only minor limitations such as "submitting a query" or "receiving a result." According to defendant, these dependent method claims are themselves directed to abstract ideas.

Defendant argues that the systems claims are nearly identical to the method claims except that the claims describe "one or more computer systems" and a "logic element." According to defendant, the "one or more computer systems" is generically described as "any suitable computer" and the logic element is simply any "hardware, software and/or combinations of both." Defendant similarly argues that the dependent system claims add only minor limitations including those identified in connection with the method claims, as well as the addition of "user-specific access rights" found in dependent claims 7 and 27.

In response, plaintiff argues that because defendant concedes for purposes of this motion that the term "node" means "data structure," then the subject matter of the '087 patent cannot be

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abstract.  According to plaintiff the patent claims embody the data structure, not the result.

Plaintiff argues that the Court cannot construe the patent to cover an abstract idea without

construing the term "node" to mean something other than "data structure node."  Plaintiff also

argues that defendant is unable to articulate a specific abstract idea.  By way of example,

defendant argued that the patent is directed at "organizing data," "categorizing and indexing

data," "organizing and retrieving data," "organizing data for efficient retrieval by categorizing

the data," and other similar descriptions.  According to plaintiff, defendant's inability to identify

a single abstract idea suggests weakness in defendant's position and demonstrates that the patent

is not directed to an abstract idea.

Plaintiff cites to *DDR Holdings, LLC v. Hotels.com L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)

in support of its position that the subject matter is not directed to an abstract idea.  In *DDR*

*Holdings*, the court examined a patent comprising "systems and methods of generating a

composite web page that combines certain visual elements of a 'host' website with the content of

a third-party merchant."  *Id*. at 1248.  In layman's terms, it appears that the patent allows an

internet retailer to publish content from a third-party retailer in order to avoid the situation in

which a user clicks on an advertisement and is redirected away from the original retailer's site.

The court initially noted that  identifying the precise nature of the abstract idea was "not as

straightforward" as in other cases.  The "idea" was described as "making two web pages look the

same," "syndicated commerce on the computer using the internet," and "...two web pages [that]

have the same 'look and feel'."  *Id*. at 1257.  Even in *DDR Holdings*, however, the court

ultimately concluded that *regardless* of the characterization of the patent, the claims satisfy step

two of the *Mayo/Alice* test.   Although the court began its analysis by noting that the subject

matter at issue involved a "challenge particular to the internet" that impliedly is not abstract, the court did not expressly find that the patent is directed to a non-abstract idea.  Rather, the court ultimately determined that "under any characterization of the abstract idea, the [ ] patent's claims satisfy *Mayo/Alice* step two." *Id.*  Thus, the Court does not find that *DDR Holdings* controls with regard to step one of *Alice*.

Here, it is not particularly difficult to identify the purpose of the patent claims.  "Under step one of *Mayo/Alice*, the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).  In determining whether an idea is abstract, courts are to ask "what the claim is trying to achieve, instead of examining the point of novelty." *Enfish LLC v. Microsoft Corp.*, 56 F.Supp.3d 1167, 1173 (C.D. Cal. Nov. 3, 2014)(*citing Diamond v. Diehr*, 450 U.S. 175 (1981)).  As such, "[c]ourts should recite a claim's purpose at a reasonably high level of generality.  Step one is sort of a 'quick look' test, the purpose of which is to identify a risk of preemption and ineligibility." *Id.*  Here, the Court finds that the patent claims are directed to the abstract idea of "data organization and retrieval from multiple data sources and data source types."  As noted above, patent claims directed at the efficient retrieval, storage, organization, and categorization of data are routinely found to involve abstract ideas.  The use of tables and indexes to sort data for retrieval are longstanding principles that have been in use for ages and can be done by a human.

As an initial matter, the Court rejects plaintiff's argument that defendant's use of interchangeably similar words in describing the abstract idea means that the patent's subject matter is not abstract.  The Court agrees with defendant that the fact that it did not use an

identical phrase in each instance in its opening brief is not particularly relevant.  Unlike *DDR Holdings*, where the concept of the patent was difficult to describe, the Court does not find that defendant's use of phrases that differ only slightly means that the idea is not abstract.

The Court also rejects plaintiff's argument that because defendant concedes that the term "node" means "data structure," the patent is automatically patent-eligible at step one.  As defendant notes, the Court's purpose at step one is to ascertain the general nature of the patent and determine whether it is directed at an abstract idea.  At step two, the Court looks to specific limitations in the patent to see whether a patent directed at an otherwise abstract idea contains an inventive concept.  Here, plaintiff fails to articulate why the presence of a "data structure" (which could be any generic data structure) somehow requires that the Court find that the idea is not abstract.  *See, Hewlett Packard*, 2015 WL 1133244 at * 6-7 ("clearly, unspecified data structures are generic computing components unless defined by further details").  To the extent plaintiff indicates that a "complex and specific" data structure requiring a "structural interpretation" is described in the prosecution history, the argument is rejected.  Plaintiff's proposed construction of node simply requires a "data structure," not a complex and specific structural implementation of a data structure.  Although unclear, if plaintiff is claiming that the idea cannot be abstract because "data structure" is a physical structure, the argument is also rejected.  Even if a "data structure" is a physical structure, the claimed data structure simply implements an abstract idea.  This is no different than using an ordinary computer to implement an abstract idea.  *See, Id*.

The Court also does not agree with plaintiff that the patent is antithetical to data organization.  Plaintiff argues that the patent avoids the cost of *reorganizing* disparate data.

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According to plaintiff, organizing data requires "copying, reorganizing and/or altering" data. The Court disagrees.  Nowhere does plaintiff dispute defendant's explanation of plaintiff's method.  Defendant explains that the patent illustrates the use of tables to locate requested data from heterogenous data sources.  The Court finds that this method does in fact *organize* data in a general sense.  Tables or indexes are populated with information that allows the data to be accessed and retrieved by selecting a type of data.  Plaintiff fails to explain why this does not equate to "organizing."  Nor does plaintiff explain why "organizing" data necessarily requires the "reorganizing" of data or the "copying" or "altering" of the information.  In all, the Court rejects plaintiff's argument that the patent is the antithesis of "organizing."

Having concluded that the '087 patent is directed to an abstract idea, the Court turns to step two of the *Alice/Mayo* test to determine whether the patent contains an inventive concept.

B.  Inventive concept

According to plaintiff, the '087 patent is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks and, therefore, under *DDR Holdings*, the patent contains an inventive concept.  Plaintiff argues that the patent is designed to solve the problems of "data overload," "costs for organizing data," "data permissions," and "downstream proliferation of data."  Plaintiff claims that these are specific problems related to computers.

Upon review, the Court concludes that plaintiff's proffered improvements, *i.e.*, the solutions to "data overload," "costs for organizing data," "data permissions," and "downstream

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proliferation of data,[2]" are not "necessarily rooted in computer technology to overcome a

problem specifically arising in the realm of computer networks." *DDR Holdings*, 773 F.3d at

1257.  Rather, these are common problems generally associated with large amounts of data, not

computer networks.  "Data overload," which plaintiff describes as "the proliferation of different

data sources" has been around for ages and is a problem that undoubtedly affects non-

computerized data storage.  Similarly, costs associated with "organizing data in a warehouse" is

a problem regardless of whether data is stored on a computer or in a physical warehouse.  Nor is

"downstream data proliferation" unique to computerized data.  For example, if an individual

acquired data from a clinical trial, a physical copy of the information would likely be required

resulting in the proliferation of data.  Moreover, obtaining permission to access data is not

unique to computing.  Certainly, permission must be required before viewing, for example, an

individual's medical records.  Because the Court finds that the patent is not directed to "a

problem specifically arising in the realm of computer networks," the cases plaintiff relies on are

inapposite.  *See, DDR Holdings*, 773 F.3d 1245; *Klaustech, Inc. v. Admob, Inc.*, 2015 U.S. Dist.

LEXIS 118352 (patent addressing "centrally located, non-scrolling advertisement display frame

on an internet browser" is directed at technical problem that did not exist in conventional

advertising realm); *Execware, LLC v. B.J.'s Wholesale Club, Inc.* 2015 WL 4275314 (July 15,

2015)(patent directed at improved user interface was a specific problem associated with

computer databases themselves); *DataTern, Inc. v. Microstrategy, Inc.*, 2015 WL 5190715 (D.

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[2]     Plaintiff introduces these concepts through an article written by the
        inventor.  Although the Court finds this article to be outside the
        scope of the pleadings, the Court will nonetheless consider these
        alleged improvements to ascertain whether the patent is directed at
        a patent-eligible concept.

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Mass. Sept. 4, 2015)(patent directed at a method for "interfacing an object oriented software application with a relational database" addressed problem that exists only in the realm of computing).[3]

Plaintiff also argues that the '087 patent contains a number of specific limitations that provide an inventive concept. The Court disagrees. According to plaintiff, the claims of the patent are not directed to "using tables to categorize and index data." Rather, plaintiff argues that "although the nodes are illustrated as tables that include categorized and indexed data, the claims are not directed to the tables themselves." Plaintiff then argues that the claims are directed to a "specific configuration of data structure elements, namely a first plurality of nodes, a second plurality of nodes, and specific interconnections within each plurality of nodes, between the pluralities of nodes and between the nodes and data structures." Plaintiff, however, fails to point to any *specific* part of the claim that offers an inventive concept. Nor does plaintiff argue that any of the terms in the claims have a specific meaning. Rather, the claims describe a generic method of creating a relationship among data contained on heterogeneous databases.

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[3]     To the extent the patent in *DataTern* could be said to be somewhat similar to the'087 patent, the Court notes that the patent at issue in *DataTern* included computer-specific claim terms such as object model, relational database, database schema, object oriented software application, and runtime engine. A number of those claims received very specific computer-related constructions. The '087 patent includes, at most, generic computer implementations such as  computer systems and data structures. Plaintiff also relies heavily on *Execware, LLC v. BJ's Wholesale Club, Inc.*, 2015 WL 4275314 (D. Del. July 15, 2015) in support of its position. The citation, however, was to a report and recommendation from a Magistrate Judge. After plaintiff filed its brief, however, the District Court Judge rejected the report and recommendation. *See, Execware LLC v. BJ's Wholesale Club, Inc.*, 2015 WL 5734434 (D. Del. Sept. 30, 2015).

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According to plaintiff, the terms "business context dimension," "interconnections," "mapping," and "data structure,[4]" require no construction.  As such, they are generic terms that do not imply any unique functionality or provide an inventive concept.  Rather, the "limitations" argued by plaintiff are simply terms that relate generally to creating relationships among data.  As plaintiff itself points out, the "nodes" could be tables that include categorized and indexed data, but need not necessarily be so.  By inserting the phrase "data structure" into plaintiff's construction of "node," the patent describes simple data structure nodes.  Thus, contrary to plaintiff's argument, the patent claims do not require a *specific* "data structure node."  As such, plaintiff wholly fails to point to any specific limitation contained in the *claims* that provides an inventive concept.  The patent does not claim *how* the computer or computer systems are "specifically programmed to perform the steps claimed in the patent.*"  See, Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).  Without describing "the how," the claims lack the "additional features" required for patent-eligibility.  *See, Intellectual Ventures I, LLC v. Capital One Financial Corp.*, 2015 WL 5165442 —F.Supp.3d— (D. Md. Sept. 2, 2015).

Plaintiff also argues that the method claims are directed to a "specific computer."  Again, however, plaintiff wholly fails to point to any language in the patent that requires a specific computer.  Rather, the system claim (claim 6) requires only "one or more computer systems."  And, the method claim (claim 31) is entirely silent as to any computer requirement, let alone a specific computer.  Because plaintiff wholly fails to point to claim language that requires a

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[4]     Plaintiff argues that the term "node" means "data structure," which
is itself a generic construction.

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specific computer, the argument is rejected.[4]

Plaintiff further argues that the limitation to "one or more computer systems" demonstrates that the claims of the patent are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." The argument is rejected. The law very clearly provides that general invocation of a "computer" is insufficient without more to establish an inventive concept. *See, Alice*, 134 S.Ct. at 2357-58 (conventional use of a computer does not transform an abstract idea into patent-eligible subject matter). The fact that the representative system claim requires the use of a computer,[5] which will undoubtedly speed up the process of organizing and retrieving data from heterogeneous databases, is not a sufficient basis to find an inventive concept. *See, Intellectual Ventures I v. Capital One Bank,* 792 F.3d 1363 (Fed. Cir. 2015)("merely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea"); *Market Track, LLC v. Efficient Collaborative*, 2015 WL 3637740 (June 12, 2015)(automating an existing manual process through the application of routine, generic, computer systems and components does not impart patent eligibility); *Enfish*, 56 F.Supp.3d at 1181 ("rapid processing of data is a generic function of computers");

**CONCLUSION**

For the foregoing reasons, Defendant Medidata's Motion to Dismiss (Doc. 88) is

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[4]  As set forth more fully above, the data permission limitation contained in dependent claims 7 and 27 do not add an inventive concept. Obtaining permission to access data is not inventive.

[5]  Claim 31, *i.e.*, the method claim, does not require the use of a computer and can be performed by human activity alone.

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GRANTED in the form of a judgment on the pleadings.

       IT IS SO ORDERED.


                         /s/ Patricia A. Gaughan
                         PATRICIA A. GAUGHAN
                         United States District Judge

Dated: 11/6/15